

National Park Management in Local Autonomy: from The Viepoint of Political Conservation in Biology: A Case Study of Tanjung Puting-Central Kalimantan

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ABSTRAK

Pengelolaan Taman Nasional dalam Era Otonomi Daerah Dilihat dari Perspektif Politik Konservasi Biology: Studi Kasus Tanjung Puting -Kalimantan Tengah. Paper ini menganalisis pengelolaan taman nasional dilihat dari perspektif politik ekologi yang menekankan atas peran dan persepsi ‘stakeholders’. Peran taman nasional adalah sangat penting sebagai benteng terakhir dalam menjaga keberadaan hutan alam. Tetapi, kondisi riil Taman Nasional Tanjung Puting sekarang ini menghadapi suatu ancaman, karena dua faktor penting yakni adanya praktek aktivitas illegal logging dan penggalian untuk usaha tambang, yang dilakukan oleh para pedagang kayu dan investor lokal dari luar dengan menyuruh masyarakat lokal untuk memotong pohon dan menggali tanah. Dengan demikian, untuk mengantisipasi masalah yang kritis tersebut, diperlukan aksi afirmatif seperti pengelolaan kolaborasi dengan berbagai stakeholders (pemerintah daerah baik propinsi dan kabupaten, LSM, masyarakat lokal) atas program reboisasi berbagai pohon, penegakkan hukum, sanksi yang keras, dan pemberdayaan ekonomi dan sosial bagi masyarakat lokal. Terjadi juga konflik kepentingan antara pemerintah pusat dan daerah dalam pengelolaan sumber daya hutan, khususnya taman nasional. Pemerintah pusat berpendapat, berdasarkan UU No.5/1990, pasal 14, yang menekankan ‘taman nasional sebagai sarana preservasi hutan alam yang memiliki kehidupan ekosistem yang unik dan dikelola berdasarkan sistem zonasi (inti, rimba dan riset). Kewenangan pengelolaan taman nasional tersebut diberikan kepada pemerintah pusat, karena misi utamanya ialah ialah untuk menjaga keanekaragaman hayati, memproteksi dan mengembangkannya. Sebaliknya pemerintah daerah (Propinsi dan Kabupaten) berpendapat, bahwa keberadaan taman nasional di daerahnya, dapat digunakan sebagai income PAD (Pendapatan Asli Daerah), untuk membangun infrastruktur daerah dan meningkatkan kesejahteraan masyarakat, khususnya dalam masa Otda. Sejalan dengan misi pemerintah daerah, masyarakat lokal juga melihat ‘taman nasional’ dari keuntungan nilai ekonomi langsung, sehingga sering terjadi praktek aktivitas illegal lgging dan tambang di kawasan taman nasional Tanjung Puting yang pada akhirnya berakibat terhadap rusaknya hutan. Dalam konteks ini, baik kepentingan konflik antara dua aktor stakeholders yang utama baik pemerintah pusat dan daerah sangat menarik untuk dikaji.

Kata kunci: Pengelolaan taman nasional, kolaborasi, stakeholders, kepentingan konflik pemerintah pusat dan daerah.

Introduction

Forest is one of the renewable natural resources that could provide elements for human being to produce and consume. Yet, forest has limited regeneration ability and limited assimilation. However during its exploitation under the limited assimilation, forest resources could be utilized on sustainable. In contrast, if it is exceeded, forest resources could be degraded and forest resources' function as production and consumption factors will be threaten (Soemarwoto 2001: 59). Therefore as potential resources, forest are important, not just for the production of the timber, but also for many social and ecological functions such as conservation of biodiversity, the supply of water, and the prevention of global warming (M.Inoue & H.Isozaki 2003). On the other hand, forest resources often become a capital that could be utilized for national development in any country, as done for timber industries (*plywood, sawn wood, pulp and paper*, etc.) in New Order (Soeharto regime) period and became the second largest foreign exchange earnings after of oil boom in 1980s-1990s.

National parks in Indonesia which are currently (2007) accounted more than fifty units (at least 23,5 million hectares) is one of the last resort for *forest conservation* to prevent forest degradation and to keep sustainable natural forest which their specific ecosystem and biodiversity on flora and fauna.

It was well-known in Earth Summit June, 1992 in Rio de Janeiro that 'forest conservation' was one of the key issues

in this Summit meeting. Although countries adopted Agenda 21, which called actions to prevent 'world deforestation', and the Forest Principles, the Earth Summit failed to conclude with the creation of a Forest Convention. After the Earth Summit, a number of international initiatives emerged, such as the Intergovernmental Panel on Forest (IPF), the World Commission of Forests and Sustainable development (WCFSD), and others; in order to find ways to halt worldwide deforestation and degradation of all types of forestlands. And its development at the Special Session of the General Assembly of the United Nations to Review and Appraise the Implementation of Agenda 21, in June 1997, was agreed that work should be continued in order to reach an international consensus on forest conservation.

Obviously, in the past, most debates regarding various aspects of forests tended to focus on the forest sector and the direct causes of deforestation and forest degradation and not on the cross-sectoral aspects of the underlying causes linked to them, such as the connection between forests and societies. However, after the UN Special Session, non-governmental organizations took the initiative on one of the most pressing agendas and started researching the underlying causes of deforestation and forest degradation.

In recent years, the world's forests have been affected by over exploitation, over harvesting, over grazing, pests and diseases, climate changes, global warming, floods, soil erosion, droughts,

storms, air pollution, forest fires, as well as economic crisis in Asia and other regions-all leading to an overall decrease on world's forest cover. Forestry in Asia, particularly in Southeast Asia which traditionally as timber supply to forest industries in Japan and others, have been strongly impacted. A number of initiatives have suggested forest policy reforms, reforestation program, against illegal logging actors, and the need for the sustainable managements of forest has been widely recognized and encouraged. But since implementation of reforms at the local level has been insufficient, it is imperative that local people begin to effectively participate in forest planning and management as well as in protected-area management.

This paper discusses the role of Tanjung Puting National Park in Central Kalimantan from *political ecology biology perspective* which emphasizes the role *stakeholders/actors* in the collaborative management and its implication on various biological issues. This paper also will analyze conflict of interest between central and local government on the policies of natural forest resources particularly on national park management.

Theoretical Review

This study uses "political ecology" as an analytical framework which emphasizes on stakeholders movement

(Figure 1).¹ Now we must clarify, what political ecology means. Many scientists (Paterson 2000; Bryant 1992; Vayda 1983; Blaikie & Brookfield 1987; Abe Ken-ichi 2003) define it differently. Paterson (2000) notes that "political ecology as an approach that combines the concerns of ecology and political economy to represent an ever-changing dynamic tension between ecology biological and human change, and between diverse groups within society at scales from the local individual to transnational as a whole." Other scientists define it as, "political ecology" a framework to understand the complex interrelations between local people, national and global political economies, and ecosystems" (Blaikie & Brookfield 1987). The concept has been adapted in a various of ways, such as Third-World political ecology, where (Bryant, 1992) notes that: "political ecology may be defined as the attempt to understand the political sources, conditions and ramifications of environmental change." Most current political ecology tends to overlook ecological dynamics and focus upon the structure of human systems (Rocheleau *et al.* 1996). Abe Ken-ichi (2003) defines political ecology, as "a collective name for all intellectual efforts to analyze critically the problems of natural resource appropriation and political economic origins of resource degradation, be they for the purpose of

¹ See Bryant, R & Bailey, S (1997). *Third World Political Ecology*. London: Routledge Press. Further the implementation for political Ecology concept, see Yoshiki Seki, "The Political Ecology of the Philippine Restoration Program: ODA, Government, and Local People", in *Philippine Political Science Journal*, Vol 22, Number 45, 2001, pp. 79-93.

¹ Abe, Kei-ichi (et.al). *The Political Ecology of Tropical Forests in Southeast Asia ; Historical Perspectives*, Kyoto University Press, Japan, 2003, pp. 3-4

academic study or practical applications”.² In other words, political ecology is concerned with the political dimensions of natural resource use and subtleties of those politics. Apparently, the scope of political ecology has been referred to as ‘a method of analysis’, rather than a unified scientific discipline or sub-discipline, which is usually characterized by a set of related ideas, premises, and theories. Meanwhile, (Vayda 1983) commented: political ecology is similar to a method applied by human ecologists analyzing policy-relevant environmental questions that is ‘progressive contextualization’. This approach starts with actors, in this case direct resource users, and considers the contexts within which they act or do not act in a particular way towards a resource. This approach also intends to explain why people use the environment in particular ways, some times causing resource decline or degradation detrimental to their own and others’ uses of the resources (Peluso 1992).

From the above definitions, apparently, Bryant’s definition, which emphasizes ‘putting politics first’ on the political ecology of sustainable development aspects is more operational on reviewed Tanjung Puting National Park. There are two reasons for this condition. First, that ‘political and economic pressure’ from the Soeharto government was predominantly colored on forest

management for three decades. Second, the implication of political and economic pressure upon ‘biological’ perspective was ignoring by forestry bureaucrats, which subsequently affect into forest degradation and deforestation.

‘Political ecology’ is a framework to approach to the subjects mentioned. It is a generic term used for the field research connecting two types of studying by bringing the point of view politics into the study of environmental disruption. It includes a small-scaled study centered on local society (e.g., cultural anthropology, applied anthropology) and a large-scaled study from national and worldwide standpoint (e.g., political economy).

Description of Tanjung Puting Area

Administratively, Tanjung Puting National Park initially established and consisted of two conservation areas, namely Kotawaringin areas of 100,000 ha based on Zelfbestuur van Kotawaringin number 24 June 13, 1936 and Sampit conservation areas of 205,000 Ha based on letter decision by Governor General of Dutch colonial number 39 August 18, 1937. Both conservation areas in Kotawaringin and Sampit, eventually merged to become Tanjung Puting, with totally covered 305,000 ha.³ This national park is very rich in flora and fauna, etc. It categorized fauna such as twelve various birds and 38

³ See Book two on *Planning and Tanjung Puting Management: 1999-2024*, published by Department of Forestry and Plantation, Directorate General of Protection and Forest Conservation, Tanjung Puting National Park Institute, p. 5-10.

mammalian. Four among famous mammalian are Orangutan (*Pongo pygmaeus*), Owa-Owa (*Hylobates agilis*), Beruang Madu (*Helarctos malayanus*), and Bekantan (*Nasalis larvatus*). In case of birds such as Sindanglawe (Storm Stork, *Ciconia stormil*), etc. From the vegetation perspective, Tanjung Puting areas is the center for biodiversity storage. For example Diptecarpus forest type covers 50-60 percent and wet forest (10 percent) from all areas. It contains valuable trees such as Meranti (*Shorea* spp), Gaharu (*Aquilaria malaccensis*), Kayu Ulin (*Eusideroxy-lon Zwageri*),

Ramin (*Gonystylus*), Rattan Damar Batu, etc.

In 1978 through the decision from Ministry of Agriculture number 698/Kpts/Um/II/1978 on November 13, 1978, which excluded 30,000 ha areas between River Serimbang and Segintung. Then, total width of Tanjung Puting National Park was reduced to become 270,040 ha. In its development in 1981 Tanjung Puting National Park declared as 'world heritage' for Biosphere Conservation by UNESCO. It means that from the management perspective, the responsibility of Tanjung

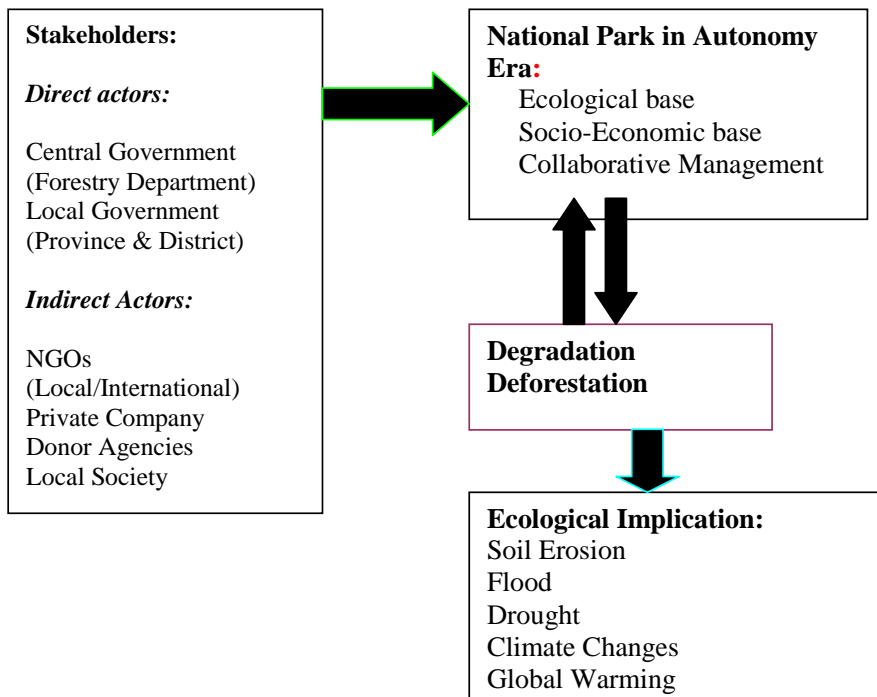


Figure 1: Stakeholders on National Park Management and its Implication (Source: improvement from Bryant and Bailey's Concept of Political Ecology 1997)

Putting maintenance not just by Indonesia government through Department of Forestry (Directorate General of Forest Protection and Natural Conservation) but also international community which actively involved on NGOs formation such as Orangutan Foundation International (OFI) and World Education (WE) that sponsored by UNESCO and Illegal Logging Response Centre (ILCR) which sponsored by European Community (EC).⁴

Ecotourism Potential

Besides, as storage of flora and fauna, National Park Tanjung Puting well-known as recreation resort for domestic and foreign tourist. There are three driving factors Tanjung Puting appointed destination by visitors: (1) the status of Tanjung Puting National Park as 'world heritage' for the biggest Orangutan habitat in Kalimantan since the middle of 1990s; (2) it was occurred in a film about Orangutan condition. This film told the bad condition of Orangutan because of some factors such as forest fires, deforestation, catches up by hunters and sold them by traders to the third parties (black market). This film was used as campaign tools to change international views on Orangutan as an extinguishing animal in Kalimantan; (3) the positive support by local and central government because it has been provided

by good access to the location, infrastructure, security, safety and social and political stability in the district level.

Some eco-tourism areas which mostly visited by visitors:

- 1) Tanjung Harapan area which has been designated as utilization and research and it well equipped with resort home for tourist, location for Orangutan Rehabilitation Center, tracking and Orangutan Meal Exhibition in certain time every morning at 8.00 o'clock and afternoon at 14.30.
- 2) Tanggui Camp for specific utilization for tracking in night visiting and Orangutan rehabilitation activities and might to see to feed up at 8.00 o'clock. This location is the habitat for deer, forest pig, various bird such as Rangkong, Paruh Bangau, and others.
- 3) Leaky Camp which was designated as specific utilization zone since 1970 for research and protection of Orangutan. This camp could find out wild Orangutan (*Pongo Pygmaeus*) rehabilitation and Owa-Owa (*Hylobates Agilis*). In the upstream of Sekonyer river in Leaky camp ones could find out Buaya Muara (*Crocodilus Porosusu*) and Buaya Senyulong/Sapit (*Tomistoma Schlegelli*) which was well-know as very wild.

There are visitors as well domestic and foreign in 2004 (Table 1). For

⁴ Hidayat, Herman (eds.) (2006). *Conflict Potential between Central and Local Government on National Park management in Local Autonomy (A Case Study of Tanjung Puting and Kutai)*, Jakarta: LIPI Press, p.44.

example visitors based on their nationality derived from United States 115, United Kingdom 101; Australia 51, Germany, 50, Japan 12. Mostly foreign visitors visited in September and October and domestic tourists in July and September. From the incomes perspective, totally received in 2004 Rp. 226.922.000 and slowly reduced in 2005 to become Rp. 178.827.000. The factors of income reduction related to the national security in terms terrorism issue and boom in Indonesia in 2000s.

After the realization of local autonomy since January 2001 the income from visitors' fees US\$ 5/one day for foreign visitors and domestic Rp. 5,000/day/person.⁵ The distribution of income divided 80 percent for local government and Tanjung Puting National Park Office received 20 percent.

Stockholder's Perception on National Park

Central Government

National Park (such as Tanjung Puting) has the significant role and strategic function for *conservation* and *protection* for biodiversity, flora and fauna. To achieve this role, central government and other stakeholders have task strategic function to maintain for catchments area, hydrology resources, watershed, to produce O₂ (carbon sink)

and micro climate, and as educational and research facilities, eco-tourism and biology ecological services, etc.⁶ There are three main purposes of national park management: 1) to protect ecological in biology process in order to guarantee sustainability its function and role as insurance life system; 2) to preserve various of natural resources and its ecosystem in order to maintain genetic preservations; 3) and to generate sustainable benefits for improvement of social welfare for society who live in and around national park particularly and society at large in general.⁷ Obviously, three purposes of national park established is appropriate with the law number 5, 1990 about "Natural Conservation and its Ecosystem" which highlighted that central government has responsibility to manage the national park. In line with these purposes, national park management in any districts in Indonesia, the National Park Officers (as representative of Directorate General of Forest Protection and Natural Conservation) must always pay attention of three dimensions namely ecological in biology aspect, economic and social. Hopefully this dimension has positive implication to other stakeholders' especially local people. Therefore to realize this dimension it should be made strategic step by establishing internal

⁵ The decision of ticket fee to Tanjung Puting National Park based on PERDA (Local Government Regulation) number 11, 2002 and Head of District (Bupati) Kotawaringin Barat, July 2002.

⁶ See Wiratno, et.al (2004). *Berkaca di Cermin Retak: Refleksi Konservasi dan Implikasi bagi Pengelolaan Taman Nasional*. Dephut dan Gibbon Foundation, hal. 200-202.

⁷ Interview with Ady Susmianto, Director of Conservation area, Directorate General of Forest Protection and Natural Conservation (Department of Forestry), May 27, 2005, in Jakarta.

zone (core zone, forest zone and research zone) and external zone, so called “buffer zone” as the border line with society’s land.

In fact to prevent national park management *illegal logging* and *mining* activities, the active role of local government (province and district) in autonomy era on establishing “Buffer zone” (zona penyanggah) is very necessary. The function of this zone that used by Agro-forestry program could be facilitated by local government and National Park Officer. The role of Agro-forestry such as *Potatoes*, *Kayu Manis*, *Albazia*, *Durian*, *Rambutan*, *Kemiri*, *Jengkol*, etc.) could be a positive implication of income generating of local people. But, the reality until now none of ‘buffer zone’ was established by local government cooperated with national park officer.

Local Government

Although local government has not been a real ‘authority’ to manage national park, based on the law (number 5/1990), but the co-management with central government is very necessary. As told by head of forest agency in local government (district) that the function of Tanjung Puting National Park is very strategic and significant for hydrology resources, watershed, catchments area for the purposes of agricultural water supply. Therefore, in order to maintain this national park, local government has moral obligation to cooperate with National Park Office. For example, to increase local people’s income generating, local government (districts)

had been established four (4) resort homes for tourist in Sekonyer village. The management of resort home was organized by local people. The charge of average room Rp. 120,000/per day, plus breakfast for foreign and Rp.80,000 per day for domestic tourist. While this research carried out in May 2006, 4 persons tourist from Belgium came and spent for tow days. The distribution of income divided, respectively 80 percent for local people and 20 percent for local government.

On the other hand, in crushing illegal logging activities such as Balak Telabang Operation One was held on December 5-24, 2000 and continuously launched with Balak Telabang Operation Two from January 22 until February 10, 2001. The synergic operation between local government, National Park Officer and local people captured 50 men in jail and more 1.500 M3 mix forest trees and 1.176 M3 Ramin trees. There were six driving factors caused deforestation in Tanjung Puting areas: 1) economic crisis occurred in 1998-2001; (2) the change of political order from central power to decentralization (local autonomy) since January 2001; 3) the weakness of coordination between law officers and the function of court in central and local as well; 4) the KKN practices (*corruption, collusion and nepotism*) happened between government officers and private business); 5) the weakness of forest security system and the inspection of forest products; 6) and the price of illegal logging is cheaper than the formal wood from HPH (Logging Forest Concession) holders.⁸

Collaborative Management

There were shift paradigms from government based management to become *collaborative management* which involve other stakeholders.⁹ It means there is an indication to effective management realization on protection area, social justice and democratize on natural resources management. Moreover, because Indonesia has ratified Biological Diversity Convention. It must realize this convention related with biodiversity conservation. NGOs's perception on national park is very strategic function for conservation areas, and it should be maintained on the principles of sustainable forest management.

Related with Tanjung Puting National Park have been carried out collaborative management with other NGOs such as OFI (*Orangutan Foundation Indonesia*), FNPF (*Friends of National Park Foundation*), WE (*World Education*), Yayasan (*Yayasan Orangutan Indonesia*) and ILRC (*Illegal Logging Response Center*) on establishing of *journal* about program and national park activities.

Friends of National Park Foundation (FNPF)

FNPF was made cooperation with Tanjung Puting Office in 1997. The fundation established from rising came

from national and international agencies such as Gibbon foundation and local private companies who has responsibility on forest and environmental conservation and empowering on social economic of local people. Actually FNPF in Kotawaringin is branch office and the head office is located in Denpasar, Bali. In realizing the program FNPF supported by other volunteer staff and local people worker. As previously told that 65% Tanjung Puting areas forest degradation because of illegal logging practices and forest fires in 1990s and the early 2000s. FNPF seriously involved for conducting rehabilitation and land conservation program in many areas by planting trees which seeds provided by self preparation of local trees seeding such as Meranti (*Shorea* sp), Gaharu, Ulin (*Eusideroxylon Zwageri*), Keruing (*Dipterocarpus* sp), Jatimas, Jelutung, Tengkawang, Ramin (*Gonystylus*), etc. In 2004 was carried out rehabilitation or reforestation program about 24 ha width and slowly reduced to become 16 ha in 2005, and in 2006 increased to become 29 ha in Camp Pesalat and Beguruh. According to Basuki, alumni of Mulawarman University, Samarinda, Head of Rehabilitation program, that he is very optimistic on acceleration of reforestation program with provided by local trees seed and actively supported by other volunteers from high school pupils and local people, etc. Mostly pupils who

⁸ Interview with Tanjung Puting National Park Officer was held on May 4, 2006. And Forester, staff of Forest Agency in District, West Kotawaringin, May 11. 2006.

⁹The practice of collaborative management among stakeholders on national park management program especially on forest rehabilitation and empowering socio-economic program of local people was familiarly carried out in 1990s.

actively engage on reforestation program campaign and previously taught conservation subject as extra curriculum in High School (SMA 2) in West Kotawaringin. But, a critical problem regarding the limited fund from other parties (international and local agencies) to carry out reforestation program in large areas.

Meanwhile FNPF cooperated with local people to carry out empowering socio-economic program. This NGO launched on buying 6 female cows and two goats for breeding program in 2005-2006. The target of these breeding activities after several years will be fruitful. Other activities, FNPF also established *Demplot* (agricultural and fishery practices demonstration) area. This training of Demplot invited local people to train their capacity and knowledge in order be able to increase fishery and agricultural products by using technical and mechanical tools, and excellent seeds. As told by FNPF field officer that actually agricultural was very potential sector from the viewpoint of width area, quality of land, irrigation from Sekonyer River and manpower. On the other hand, on the improvement of skill, FNPF officer gave facilities among 2 persons from Sekonyer village to attend training of curving statue and *Batik* printing about one month (2003) in Bali. Hoping, after returned home, they actively involved teaching statue and Batik on technical knowledge to local people. Based on the village report (2006), eventually obtained about 20 persons who practiced as statue and Batik trainees. Mostly their products

such as Orangutan statue, garment products (kaos/sport clothes) and kitchen tools- made by local people as souvenirs and sold to tourist. The income generating from these activities such as souvenirs to become best selling for domestic and foreign tourists as well and could improve their social welfare.

World Education (WE)

The WE is categorized as international NGO, because it has some programs on conservation and empowering local socio economic in many countries. The head office of WE is located in Boston, United States of America. The WE has *MOU* (Memorandum of Understanding) with Directorate General of Forest Protection and Natural Conservation (PHKA) and it represented by Balai Taman Nasional (National Park Office).

There are two principles aims for developing WE on the promotion of *ICDP* (Integrated Conservation and Development Project) namely: 1) to improve process of planning and decision making from stakeholders movement in terms of forest conservation, reforestation program in Tanjung Puting National Park; and 2) to launch empowering socio economic program through improving agricultural and poultry products.

In general the achievements target in period October 2003 and February 2006, among of them:

- 1) The fix establishment of WE operational office in Pangkalan Bun for Tanjung Puting Integrated Conservation and Development Project (TPICDP);
- 2) Intensively cooperate with Tanjung Puting National Park Office and

other stakeholders on synergic constructing program;

- 3) The food endurance and empowering economic program through implementing of paddy rice, poultry, fishery, agro-forestry products;
- 4) And improvement of Group organization.

We could realize about fifty up sixty percent the above program. For example, the endurance of food in twelve villages to give service about 1.000 poor farmers, namely 5 villages located in East Kotawaringin (Seruyan) and 7 villages located in Pangkalan Bun (Figure 2). As told by WE symbol: "because we learn together and produce excellent products." WE develop leading program such as fishery (fish pool, breeding), agricultural products (paddy rice, fruits, vegetables, etc.), poultry (hen, a leading chicken/ayam buras) in some villages in Kumai sub-district.¹⁰ For example, in terms of agricultural products, the intensification of mechanism through using various leading seeds (punggur, mendawa, martapura, etc.), technical instructions, participation of local people eventually produce good results. In 2005 the production of rice increased to become 4,5 ton/per ha, which previously produced average 2 ton/per ha in 2004. This condition has positive impacts to improve social benefits for local people, particularly to provide their food sustainability stock in the future. The response from local people also positive,

as told by informan (Yd) that cooperation between NGOs (such as WE, FNPF, etc.) and National Park Officer and local people to promote socio-economic and ecological environments could impact on increasing benefits for their incomes generating.

Conflict of Interest Central and Local Government

The spirit of reformation (1998-2005) in autonomy era was strongly demand on positive values such as *democratization, accountability and transparency*. As we know that 'democratization' is characterized by "conflict interest among stakeholders. Therefore, freedoms of expression eventually cause freedom to criticize other parties who has different ideas.¹¹ In context the relationship between central and local government have been occurred 'conflict interest' particularly on forest resources and natural resources in general. Centralization which had been carried of by central government in Soeharto regime has been shifted into a new paradigm of 'decentralization'. It is because local autonomy is one of the formations of the real practice of democracy to guarantee individual, group, community rights and freedom in society. In line with central and local government relation, democracy demands freedom for local government to manage their affairs in many aspects. On the other hand, autonomy era hoped

¹⁰ See Quarterly report of WE program Period October 2003 to February 2006, Pangkalan Bun.

¹¹ Maswadi Rauf, "Local Government and Horizontal Conflict" in Syamsuddin Haris (eds.), *Decentralization, Democratization and Accountability: Local Government*, Jakarta: AIPI and Partnership for Government Reform in Indonesia, 2002, p. 145.

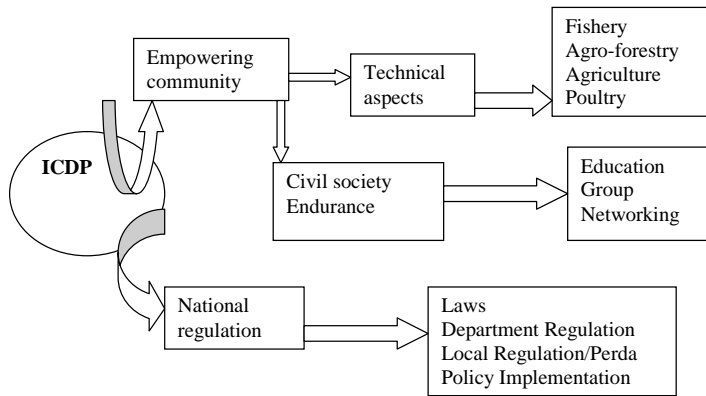


Figure 2: Grand Operational Program of World Education Source: Booklet of WE (World Education), 2005.

by local government to develop self reliance and independence and to promote many things to be more progress and subsequently drive local people to be more welfare and prosperity. Related with “national park management” happened” conflict of interest.

Local government sees national park is very potential resources, minus conservation, economic orientation and could be exploited from timber and non-timber exploitation in order to expand their *PAD* (original income of local people). But so far this planning just reach into intellectual discourse among political elites and still not yet publish *Perda* (local government regulation) as regulation from the association decision of executive (head of district) and legislative institutes (local parliament). This condition based on interpretation on law No. 32/2004 about “Local Autonomy”. Even if local government’s land occupied more than

half, it is worth to ask “Special Compensation Fees” (DAK) from central government. This DAK can be used to establish infrastructure and empowering socio-economic of local community who live in and around the border of national park (Figure 3). From this point, actually there is a plan to manage national park by their authorities. But, because of the real condition suffered by local government namely limited of manpower and allocation of local budget beyond their capacities. As a result, local government (Kotawaringin Barat) just want to cooperate with central government (through National Park Officer) and other stakeholders for this areas, based on consideration as follows: (1) strategic function of Tanjung Puting National Park as asset for local, national and international and its function for bio-diversity conservation, protection of fauna and flora especially Orangutan

and other animals; (2) it is as ecotourism area for domestic and foreign tourists; and (3) to improve socio-economic program for local people.

Central government's perspective highlighted that *conservation* in national park areas is very significant.¹² Because this area categorized as its strategic function as catchments area, hydrology resources, bio-diversity storage, flora and fauna conservation, eco-tourism, etc. Therefore any illegal activities such as illegal logging and mining, land encroachment, land cultivation by local people and others s intolerable and actors must be captured in jail. For this purpose, the authority rights to manage still belong to 'central government', based on Law No. 5/1999 about "Natural resources conservation and Its Ecosystem").

Currently happened that increasing of global warming which eventually affect into climate changes as indication of fail the 'Kyoto Protocol' agreement in 1997. There are many affects of global warming: (1) from 1974-2004 the effect of *green house (rumah kaca)* CO2 increases 70 percent (from 28,7 billion ton to 49 billion ton CO2); (2) the sea level increases about 18 cm until the end of 21 century; (3) the provided clean water decreased in Asia; (4) in Africa until 2020 about 75-250 million of people suffer the lack of water; (5) and intensity of heating wave as the affect of climate change happened in South Europe and other part of Europe (*Kompas*,

November 19, 2007). Underlying factors of Kyoto Protocol fail, because of three critical rationales. First, United States of America (USA) and Australia which considered significant contribution on gas emission do not agree to make signature. Second, the concept of CDM (*Clean Development Mechanism*) which highlighted on reforestation program among developing countries who especially own 'tropical forest' reluctant to perform this program. The concept of CDM is unrealistic which emphasizes that critical forest land before 1960s must be carried out for reforestation program. Even the practice of logging industries (HPH) among developing countries, including Indonesia began in the end of 1960s. The consequence of HPH's practice emerged forest degradation and deforestation mostly occurred in 1980s, which do not properly perform a sustainable forest management. Third, the emerging of China, Brazil and India as industrialized countries which greatly contribute carbon dioxide must ratified 'KyotoProtocol' agreement on reduction of gas emission.

Then, what is the role on national parks Indonesia which own about 23,5 million ha? It's role is very significant for production carbon sink to protect global warming. Actually the real challenge how central government which represented by Department of Forestry encourages with international foundation agencies whether among advanced countries, *OPEC*

¹² Interview with Bappeda staff (Local Planning Agency) in Kotawaringin Barat, on May 4, 2007. See, Hidayat, Herman (ed.) (2006). *Op cit.* p. 77.

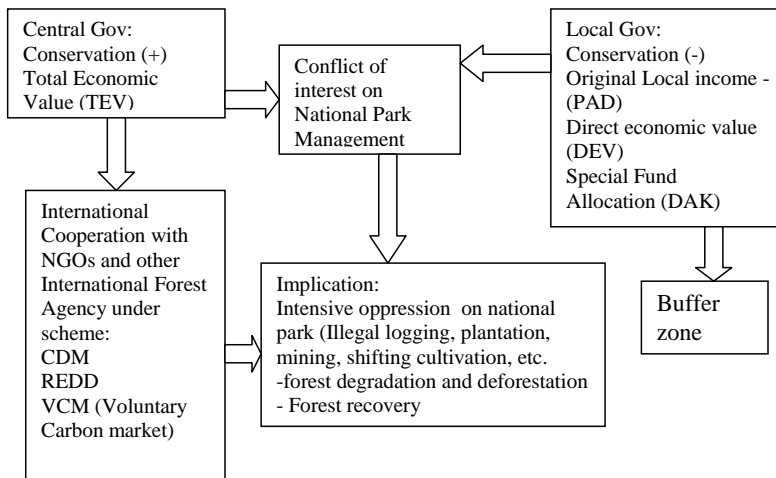


Figure 3 Conflict of interest on National Park and Other Co operations Source: Data improvement (2006).

(*Organization of Petroleum Exporting Countries*) international NGOs (Greenpeace, World Education, WWF, etc.), United Nations institute on climate changes, etc., cooperate for maintaining national park management. In contrast advanced countries (include G-8) which mastering science, technology and wealth must cooperate with developing countries, especially who own tropical forest for realizing reforestation program and empowering of socio-economic local people.

Vice President, M. Jusuf Kalla launched idea that *oil for education* and *oil for forest* in Summit OPEC meeting on November 17-18, 2007 in Riyadh. Oil for education considered to become significant, issue, because oil consumer countries (include Indonesia) really suffered heavy burden as oil's price up

to spend their budgets. Meanwhile, oil for forest related to environmental issue, because oil is the greater part to produce (fossil elements) that eventually cause to global warming. The Conference subsequently agreed the idea and finally established 'fund rising' to take US\$ 50 cent/per barrel from OPEC members. This fund intends to sustainable forest development and to overcome global climate change and educational program in developing countries (*Kompas*, November 19, 2007). And even King Abdullah bin Abdul Aziz in closing of summit OPEC meeting gave donation about US\$ 300 million for carrying out an initial energy research, environment and climate change issue to developing countries (*Media Indonesia*, November 19, 2007).

Currently, Department of Forestry launches concept of REDD¹³ (*Reduction Emission on forest degradation and deforestation*) on November 6, 2007 while held national workshop on reduction 'gas emission' in Jakarta. This concept highlights to maintain a sustainable forest and could continuously contribute its benefits to local people and other parties. But, global responsibility must be performed by advanced country's contributions for giving 'incentives' as fund raising scheme to this program. In fact this concept will be adopted in UNFCCC (on climate change) in Bali on December 3-14, 2007. But in case of Indonesia, REDD concept schema has examined in three areas. First, it has done on 'forest hope' areas 101,000 hectares (*Hutan Harapan*) as forest production restoration project that located in the border of Jambi Province and South Sumatra in 2006. Actually allocation of concession from Department Forestry for 100 years to restore the forest areas done by *Restorasi Ekosistem Indonesia Company* (*Kompas*, November 7, 2007). According to Sukianto Rusli, Director of *Wild Bird Conservation* that "forest hope (*Hutan Harapan*) is tropical forest in low land which a final rest areas about 500, 000 ha and previously existed 3 million hectares. This forest land contains rich of mammalian species in Sumatra." Second, Malino district in East Kalimantan efforts to categorize its protected forest areas about 325,0416 ha

to voluntary carbon market (*Kompas*, November 9, 2007). The cooperation of three parties initiates by *Borneo Tropical Forest Rain Forest Foundation* (BTRF) with Malino district and *Global Eco Rescue (Ecological Service Company)* from Nassau, Bahamas Caribbean Archipelago. This cooperation for forest utilization under schema of voluntary carbon market (VCM) to protect forest areas and maximalize its benefits to improve social welfare of people. The VCM schema is one of carbon trade scheme out of CDM (*Clean Development of Mechanism*). According to John Alexander Embiricos, CEO of Global Eco Rescue (GER) said that economic values considered uncertain from this project cooperation for two years. But the GER will give 1 Euro/per ha of forest land which covers of its agreement. That amount of money will be utilized to identification process of carbon sink production from this forest absorption. On the other hand, Marthin Billa, head of Malino district said that carbon trade scheme could not get benefits anymore. But at least, he is very optimism, that this project could elevate social welfare of his people and maintain of forest areas. Third, to prevent global climate change until 2025, Emmy Hafild, Executive Director of Greenpeace Southeast Asia cooperates with Local government Riau to protect *peat swamp forest* (*Hutan Rawa Gambut*). As known that Riau owns 4 million ha from 22 million ha of

¹³ See Wahyudi Wardoyo, "about Forest and Climate Change Anticipation", in *Tempo*, Edisi Khusus 3 Tahun SBY-JK. 29 Oktober-4 November 2007. Wahyudi Wardoyo, "about Forest and Climate Change Anticipation", pp.137.

peat swamp forest Indonesia could produce 14,6 billion ton carbon dioxide which currently saved in 4 million ha. This cooperation between both parties (local government of Riau and Greenpeace), if Riau could manage 4 million peat swamp forest ha from forest fires and conversion forest land into plantation will be paid US\$ 5 until 20 per ton/carbon dioxide

Another example of 'carbon emission reduction' scheme trade between Japan and Indonesia Power and Fajar Futura Company with supported by BPPT Agency (Technology Assessment and Application Agency) highlights of five project of micro hydro in Indonesia (Cilencak, West Java with 1megawatt/MW, Siteki and Blumbungan in Banjarnegara, Middle Java 1,2 MW and 1,6 MW, Ketenger in Purwokerto 0,5 MW and Rante Bala, South Sulawesi 2,4 MW) (*Kompas*, November 10, 2007). This cooperation to reduce carbon emission bought by Japan about 30,000 ton carbon dioxide per year under the scheme of CDM (*Clean Development of Mechanism*) under the Protocol Kyoto mandatory.¹⁴ According to Irhan Febijanto, Coordinator of CDM Team in BPPT that "electric power Engine by using micro-hydro energy is well know ecological friendship and low investment compared with other renewable energy resources". But this scheme is actively engage local people on managing of electric distribution and get benefits of energy and encourage local people to maintain ecological conservation by

protecting rain water in catchment's areas.

Its Implication

There are two ecological impacts which eventually affect on Tanjung Puting areas in the near future. First, illegal logging practice by local people and big wood traders who own company for wood trading in local and export to overseas. Second, illegal mining which affect on water contamination.

Illegal logging means as exploitation forest products (timber) from forest product, conservation and protected areas), through illegal log cutting and its wood process networks.¹⁵ The intensive illegal logging occurred in 1998 and the early 2000s in reformation era. While happened economic crisis in Indonesia which seriously affect in hard difficulties of life among local people, unstable of social and politics, less of security and law sanction. This condition cause driving factors on illegal logging in Tanjung Puting National Park. The protected trees such as Ramin (*Gonystylus bancanus*), Ulin (*Eusideraxylon Zwageri*), Meranti (*Shorea* sp), Keruing (*Dipterocarpus* sp), etc., were seriously cut by local people and new comers. The big wood trader as well-known from Tanjung Lingga Group, which leaded by Abdul Rasyid, actively involved as actor of illegal logging. The illegal logging products after shipping from Seknyer River to Kumai port subsequently exported to Singapore, Malaysia, China,

¹⁴ The estimation of carbon emission reduction market currently cost US \$ 5-20 per ton.

Hongkong, and Taiwan.¹⁶ Obviously, illegal logging practice in field, could be identified actively by six main actors: (1) wood traders (cukong), capital holders, and bureaucrats and military); (2) local people and new comers; (3) factory holders (plywood, sawmill, molding, pulp and paper, etc.); (4) HPH holders or IPKH as thief and timber collectors; (5) government officers from forest agency; and (6) and foreign businessmen.

The six actors above eventually support in the operation by various parties such as Indonesian bureaucrat, soft sanction and regulation, and collusion between bureaucrats and businessmen. The ecological impact from serious illegal logging eventually affect into forest fires in 1998-1999, flood in Sekonyer River in rainy, drought in summer season, soil erosion, loss of biodiversity, extinction of flora and fauna such as Orangutan and other animals.

On the other hand it happened 'water pollution' in Sekonyer River because of Indo Turba factory company with previously running for CPO of oil palm. This factory initially process CPO from oil palm plantation which is located in upper Sekonyer River and eventually got damage on water treatment. It happened 'water pollution that seriously affects animals in river such as Crocodile, turtle, various fishes in Sekonyer River- were among them died. The water

pollution also affect into local people which previously use water for their needs such as agricultural, take bath, kitchen water utilization, clothes washing, etc. The effect of mining activities which produce Pasir Zirkon (Zirko sand) and Pasir Puya' (Puya sand) as raw material for ceramic and asbes. According to Bappeda staf in Kotawaringin, there was no legal 'permission' on mining exploration. Obviously this mining exploration which carried out by migrant workers from Java, Banjar, Bugis, Madura and some local people seriously affect local government income loss, biological: soil erosion, forest degradation, water pollution, etc. This condition encourages biological and tourist cost because of water pollution toward local people from their primary and secondary subsistent, supply water for their households affairs (take bath, clothes washing, etc.)-which finally obliged local people to buy water for their needs. Focusing on tourism section income's loss happened in the resort places surrounding in Kumai and Sekonyer village. The domestic and foreign tourists that usually visited in July and September annually decreased just reached 865 persons for foreign and 393 for domestic in 2002, if compared with tourist visited in 2001 reached fantastic 2.380 foreign and 506 domestic. The income from ticket fees reached Rp. 7.144.000,-.

¹⁵ Riza Suarga, *Pemberantasan Illegal Logging: Optimisme di Tengah Praktek Premanisme Global*, Tangerang: Wana Akasara Press, 2005, p. 6-7.

¹⁶ See *Illegal Logging in Tanjung Putting National Park: And Update on the Final Cut Report*, by Telapak and Ela NGOs (ELA: Environmental Investigation Agency), 2000, p. 13-19.

Conclusion

The impacts of human activities on utilizing of fossils (oil and gas) species and land changes (forest land conservation into plantation areas) have been causing 'global warming'. This phenomenon currently happened on 'climate change' which eventually affects on reducing food products, water distribution constraint, flood, drought, sea water tide, and plantation diseases, etc. According to *Stem Review* report that deforestation in developing countries such as Indonesia, Brazil, India, etc.' contributed gas emission (CO₂) about 20 percent from global gas emission. Meanwhile, carbon sink which currently saved in forest ecosystem considered to produce greater amount compared with saved in the atmosphere. From this perspective, in order to establish conducive sphere, international support is very significant to protect existed forest areas.

Actually Indonesia owns 23,5 million hectares of forest conservation (national park, Suaka Alam/natural forest for flora and fauna, etc), from total Indonesian forest areas 123,4 million hectares. This condition, actually contribute to produce carbon sink (O₂) to protect 'global warming'. Therefore, implementation of gas emission reduction through concept of *REDD* (reduction on forest degradation and deforestation) could eventually give positive 'incentive' into developing countries who own 'tropical forest'. This incentive from advanced countries by paying *REDD* (per ha/1 Euro) could be intensively utilized for

forest conservation through huge reforestation program and empowering socio-economic program for local people. As told by Susilo Bambang Yudoyono, Indonesian President in the seminar on 'Climate Change Convention' in New York, in September 2007 that he launched positive idea which supported by other developing countries 'on the necessary to cooperate between developing and advanced countries on managing environmental issues'. Therefore, this cooperation will be established on forest sustainable management and even to formulate developing countries position together who own tropical forest to realize affirmative action on forest conservation. Hopefully the 'financial mechanism scheme on *RADD*' eventually agreed by participants in the COP-13 in the international seminar on UNFCCC (Convention Work Scheme United Nations on Climate Change) in Bali December 3-14, 2007.

Currently forest degradation and deforestation which causing by illegal logging, forest land conservation to plantation and mining activities, etc., occurred in many districts in Indonesia. Based on the report from Department Forestry officer that deforestation reached 1,5 million ha annually. Certainly the real phenomenon of flood, drought, soil erosion, climate changes, global warming, etc., provide us as serious impacts on ecological disaster from forest degradation and deforestation. Therefore to overcome this serious threat 'political ecology' concept that actively engaged stakeholders' movement from

central and local government and private sector as direct actors and NGOs whether local and international as well, academicians, and local people as indirect actors are very significant to be involved as integrated solution for national park management.

'Collaborative management' which currently promoted in reformation era as *alternative concept* to be implemented on national park management is very fascinating. It occurred on conflict of interest of national park management between central and local government. This concept highlights among stakeholders role on promoting rehabilitation or reforestation program and empowering socio-economic local people, apparently looked at as 'positive solution' to recover forest degradation and deforestation in the near future. Therefore the commitment and consistency to perform 'affirmative program' among stakeholders such as the central government on encouraging international donation agencies cooperation, National Park Office and NGOs which invited local people and the serious attention to establish "buffer zone" for *agro-forestry program* by local government as means of 'incomes generating' for local people is very necessary to be realized in autonomy era.

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